

Claims

1. A light emitting device wherein

a plurality of GaN-based light emitting elements are formed
on an insulating substrate, and

5 the plurality of light emitting elements are monolithically
formed and connected in series.

2. A light emitting device according to Claim 1, wherein

the plurality of light emitting elements are arranged in a
10 two-dimensional pattern on the substrate.

3. A light emitting device according to Claim 1, wherein

the plurality of light emitting elements are grouped into
two groups, and

15 the two groups are connected between two electrodes in parallel
so that the two groups are of opposite polarities.

4. A light emitting device according to Claim 1, wherein

the plurality of light emitting elements are connected by
20 air bridge lines.

5. A light emitting device according to Claim 1, wherein

the plurality of light emitting elements are electrically
separated by sapphire which is used as the substrate.

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6. A light emitting device according to Claim 2, wherein

the plurality of light emitting elements are grouped into
two groups having equal numbers of light emitting elements,

an array of light emitting elements in each group are placed

in a zigzag pattern, and

the two groups of light emitting element arrays are connected between two electrodes in parallel so that they are of opposite polarities.

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7. A light emitting device according to Claim 6, wherein

the two groups of light emitting element arrays are alternately placed.

10 8. A light emitting device according to Claim 6, wherein

the light emitting element and the electrode have a planar shape of approximate square.

9. A light emitting device according to Claim 6, wherein

15 the light emitting element and the electrode have a planar shape of triangle.

10. A light emitting device according to Claim 2, wherein

an overall shape of the plurality of light emitting elements
20 and the electrodes is approximate square.

11. A light emitting device according to Claim 10, wherein

a light emitting element array comprising the plurality of light emitting elements is arranged in a zigzag pattern.

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12. A light emitting device according to Claim 6, wherein

the electrode is an electrode for an alternate current power supply.

13. A light emitting device according to Claim 6, wherein
the two groups of light emitting element arrays have a common
n electrode.

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